

THE STUDY OF VARIATIONS IN THE ORIGIN AND THE COLIC BRANCHES OF THE SUPERIOR MESENTERIC ARTERY

INTRODUCTION:

Superior mesenteric artery shows variation in its origin and its branching pattern.

A sound knowledge of the presence of variations of Superior mesenteric artery is important for Surgeon, Physician, Radiologist, Gastroenterologist and Vascular Surgeon.

AIM OF STUDY:

Examining the pattern of variations in the origin of the Superior mesenteric artery and its colic branches, mainly in South Indian population.

Comparing the variations with the previous study.

PARAMETER:

- Level of origin
- Course of artery
- Level of termination
- In branching pattern
- Relation with coeliac trunk

- Relation with pancreas

MATERIALS AND METHODS:

A total number of fifty Superior mesenteric arteries were studied.

Thirty Superior mesenteric arteries were studied from the cadavers by dissection method at Government Stanley Medical College.

Twenty Superior mesenteric arteries pictures of CT angiogram was taken at Department of Radiology, Government Stanley Medical College.

RESULTS:

The following findings were seen in the present study.

- Normal origin of Superior mesenteric artery from abdominal aorta.
- Superior mesenteric artery and coeliac trunk arose as a common trunk from the abdominal aorta.
- Superior mesenteric artery and Inferior pancreaticoduodenal artery had a common origin from the abdominal aorta.
- Absence of middle colic artery.
- Common origin of Right colic artery arising from the ileocolic artery.
- Ileocolic and right colic artery had a common trunk from Superior mesenteric artery.

- Appendicular artery arising from inferior division of ileocolic artery.
- Double appendicular arteries, one from ileocolic artery before division and the other from the inferior division of ileocolic artery.

CONCLUSION:

A thorough knowledge about the normal pattern and abnormal pattern of Superior mesenteric artery and its branches are helpful for correct interpretation of any invasive procedures and resection of colon for carcinoma, intestine transfers, resection of small and large intestines and appendectomy and embolectomy.

Keywords : Coeliac trunk, Superior mesenteric artery, Inferior pancreaticoduodenal artery, middle colic artery, Right colic artery, Appendicular artery, Ileocolic artery.